ABSTRACT

A method and apparatus is described for segmenting an image, for adaptively scaling an image, and for automatically scaling and cropping an image based on codestream headers data. In one embodiment, a file that can provide a header that contains multi-scale entropy distribution information on blocks of an image is received. For each block, the block is assigned to a scale from a set of scales that maximizes a cost function. The cost function is a product of a total likelihood and a prior. The total likelihood is a product of likelihoods of the blocks. The image is segmented by grouping together blocks that have been assigned equivalent scales. In one embodiment, the file represents an image in JPEG 2000 format.